

speed should again be higher, but no more than 1.01 times as high as the transfer speed along the first dryer unit. The claim then further requires that the transfer speed along a subsequent dryer unit be higher again, but no more than 1.01 times as high. Thus, the claim specifically requires that the speed increase at three different points. At the first point of transfer to the dryer unit, the allowable range of increase is greater than the other two points. The transfer speeds are set with a focus on the last press is longitudinal elongation, and first and second longitudinal elongations in the dryer units. Noting for example lines 25-26 on page 23 of the original specification, longitudinal elongation of the wet web that is caused at the last press is approximately 3%. Accordingly, to absorb this longitudinal elongation the transfer speed along the first dryer unit is set to no more than 1.04 times the transfer speed along the most downstream press unit.

The attached reference Fig. 1 shows a chart of wet tensile strength verses elongation percentage at the most downstream press unit. As can be seen from the chart, if the longitudinal elongation exceeds 6%, the wet tensile strength begins to decrease. This would mean that when elongation exceeds 6% a gap occurs between the fiber network and the wet web, i.e. interfiber bonding of the wet web shifts, tension cannot be sustained any longer and the fiber network begins to break. Setting the transfer speed along the first dryer unit to be no more than 1.04 times as high as the transfer speed along the most downstream press unit results in the longitudinal elongation to be no more than 4%. As can be seen from Fig. 1, this is well within the stable transfer area. Accordingly, by setting this limit, longitudinal elongation caused at the last press can be absorbed and wet web slack can be prevented with certainty, while making sure that the web remains within a stable transfer zone.

Sollinger discloses a press section P in a drier section T which include respective drivers M for independently driving "the aggregate." As noted in column 5, each driver M may be connected with a speed governor 30. The speed governor 30 may be coupled to a tension monitoring device determining the tension of the web in each point of separation between adjacent aggregates. Thus as discussed at the top of column 6, the "speed governor 30 may regulate, in a known manner, any desired speed difference between each adjacent aggregate to maintain tension on the web within the separation space . . . to ensure that the pulp web is

properly stretched, the driver for a downstream aggregate should drive its respective drive cylinder at a speed slightly greater than the speed of the adjacent upstream aggregate . . . at the end of the drier section speed governor 30 may drive the last drier group at a speed lower than its adjacent upstream aggregate so as to maintain web tension during shrinkage of the drying web . . . the regulated speed differences between each adjacent aggregate may be set to a relatively small value."

However Sollinger fails to disclose the concrete numerical limitations set forth in claim 18. Sollinger fails to disclose that the increased speed from the last press unit to the first drier unit should be no more than 1.04 times that of the last press unit. Similarly, it fails to disclose or suggest that the increase in speed from a first drier unit to a second drier unit, if any, should be no more than 1.01 times the speed in the first drier unit. Further, Sollinger fails to recognize that an increase in speed along a subsequent drier unit after the second drier unit should also be limited to no more than 1.01 times as high as the transfer speed along the second drier unit, while still being a higher speed.

More particularly, Sollinger provides no guidance as to what is a "slight difference" between the last press unit and between the drier units. There is no recognition from Sollinger that, for example, the increase in speed from the last press unit to the first press drier unit can be higher than that between the first drier unit and the second drier unit or the second drier unit and a subsequent drier unit.

Rather, Sollinger simply provides a general indication that there may be increases in speed of a slight amount or small amount. Such increases are regulated by tension members. However, it is noted in particular that there is no disclosure of any specific tension monitoring device, or any indication how such tension monitoring device would work. There is no discussion of the accuracy of any such tension monitoring device, and its precision in its employment in regulating speed and being combined with the governor 30. All Sollinger states is that the pulp web is "properly stretched" through the slight speed differences. However, there is no guidance as to any limitations or other problems that might occur.

By contrast, the present invention recognizes a limit of each of the respectively defined transfer points as set forth in claim 18. Such limits are not inherent or obvious from Sollinger.

For such features to be inherent, they must flow as a natural consequence of the structure and operation disclosed in Sollinger. However, because there is no guidance or discussion as to specific limits, there is nothing to suggest to one of ordinary skill in the art that employment of Sollinger would limit the increase in speed to no more than 1.04 times as high between the last press unit and the first drier unit. Even further, there is nothing to suggest that the increase in speed from the first drier unit to the second drier unit should be no more than 1.01 times the speed of transfer along the first drier unit. And again, there is nothing to indicate, and no line of reasoning set forth by the Examiner, to indicate that following Sollinger would result in an increase in speed from the second drier unit to a subsequent drier unit of no more than 1.01 times the transfer speed along the second drier unit.

In the present invention, the importance and criticality of these limits has been recognized, as discussed in the specification. Such limits are not recognized or discussed in Sollinger. Nor is there anything to suggest to one of ordinary skill in the art to arrive at such limits as specifically claimed. There is no reason to believe that one of ordinary skill in the art, in looking at Sollinger, would be led to such limits.

As such, it is respectfully submitted that claim 18 is not in fact inherent from Sollinger, and is not rendered obvious from Sollinger. Indication of such is respectfully requested.

In view of the above remarks, it is submitted that the present application is now in condition for allowance, and the Examiner is requested to pass the case to issue. If the Examiner should have any comments or suggestions to help speed the prosecution of this application, the Examiner is requested to contact Applicants' undersigned representative.

Respectfully submitted,

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